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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/478,731	01/06/2000	Charles W. Wampler II	H-205672	2074
7590 12/17/2003			EXAMINER	
KATHRYN A. MARRA GENERAL MOTORS CORPORATION LEGAL STAFF MAIL CODE 482-C23-B21			DAY, HERNG DER	
			ART UNIT	PAPER NUMBER
P.O. BOX 300 DETROIT, M			2128 DATE MAILED: 12/17/2003	8

Please find below and/or attached an Office communication concerning this application or proceeding.



Art Unit: 2123



1. Claims 1-9 are presented for examination. Applicant was asked to supply documents material to the patentability of the claims (paper # 2, section 3). Applicant responds by stating that, "applicant encloses a copy of the applicable pages of the Paul text" and "a copy of that (Orin and Shrader) publication is enclosed with this response" in page 8 of Applicant' Response (paper # 5), mailed June 10, 2003. However, the above-mentioned publications are not in the file. Therefore, please note the following Requirement for Information under 37 C.F.R. 1.105.

Requirement for Information - 37 C.F.R. § 1.105

- 2. Applicants and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.
- (1) R. P. Paul, "Robot Manipulators: Mathematics, Programming, and Control", MIT Press, Cambridge, MA, 1981, refer to in lines 8-10, page 14 of the specification.
 - (2) Orin and Shrader [1984], referred to in line 24, page 22 of the specification.
- 3. The information is required to enter in the record the art indicated by the applicant as relevant to this examination in the specification:
 - (1) "Techniques for mathematically modeling such devices can be found in graduate-level textbooks on robotics. A common approach is the "A-matrix" method, based on 4 x 4 homogeneous transformation matrices, as described in R. P. Paul, "Robot Manipulators: Mathematics, Programming, and Control", MIT Press, Cambridge, MA, 1981" (page 14, lines 8-10).
 - (2) "This is equivalent to finding the Jacobian for the endpoint of a robot. Orin and Shrader [1984] give a good summary of algorithms designed for this purpose" (page 22, line 24).



4. For the reason provided, the above-identified publications is considered especially relevant to the instant application and appear to be essential to the instant invention and claims, and therefore, the Applicant is required to provide the office with copies of the complete books or publications for consideration. The Examiner needs to consider them in so far as they appear to be material to the patentability of the application as per 37 C FR. 1.56.

- 5. The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicants' first complete communication responding to this requirement.
- 6. This requirement is subject to the provisions of 37 CFR 1.134, 1.135 and 1.136 and has a shortened statutory period of 2 months. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Herng-der Day whose telephone number is (703) 305-5269. The examiner can normally be reached on 9:00 17:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin J Teska can be reached on (703) 305-9704. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Herng-der Day December 11, 2003